WHAT IS CLAIMED IS:

1. A system for assisting operators in electronics manufacturing plants, the system comprising:

a processor;

a data storage device coupled to the processor;

a display coupled to the processor;

monitoring software stored in the data storage device and adapted for being run on the processor; and

at least one of a circuit panel magazine feeder monitoring device, a screen printer monitoring device, a component placement machine monitoring device, an oven monitoring device, and a magazine storage monitor device.

2. The system as recited in claim 1 wherein the system includes the screen printer monitoring device and the component placement machine monitoring device.

3. The system as recited in claim 1 wherein the component placement machine monitoring device includes a splice detection subsystem and component closed-loop validation subsystem.

4. The system as recited in claim 1 further comprising a network connecting the processor and said at least one monitoring device.

5. The system as recited in claim 4 wherein the network is a wireless LAN.

6. The system as recited in claim 1 wherein the display is part of a handheld device.

7. The system as recited in claim 6 wherein the processor is part of the handheld device.

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8. The system as recited in claim 6 wherein the processor is located on a stationary server, the server being coupled to the handheld device in a wireless fashion.

9. A method of operating an electronic manufacturing plant comprising the steps of
    providing a system to at least one operator, the system comprising a processor; a data storage device coupled to the processor; a display coupled to the processor; the processor configured to run monitoring software stored in the data storage device; monitoring software stored in the data storage device and adapted for being run on the processor; and at least one of a circuit panel magazine feeder monitoring device, a screen printer monitoring device, a component placement machine monitoring device and a magazine storage monitor device; and
    permitting the operator to operate the plant using, at least in part, the system.

10. The method as recited in claim 9 further comprising alerting the operator when a preselected limit of the monitoring software is reached.

11. An electronics device manufactured according to the method of claim 9.

12. A printed circuit board assembly line comprising:
    a screen printer having a screen printer monitoring device for sensing a solder level at the screen printer;
    at least one component placement machine having a feed tape and a placement monitor for monitoring at least one of the existence of a feed tape splice and the number of components on the feed tape; and
    a processor receiving data from the screen printer monitoring device and the placement monitor.

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13. The printed circuit board assembly line as recited in claim 12 further comprising a conveyor located at least between the screen printer and the at least one component placement machine for transporting circuit boards.

14. The printed circuit board assembly line as recited in claim 12 further comprising a network between the placement monitor and the processor.

15. The printed circuit board assembly line as recited in claim 12 further comprising a display for displaying information as a function of the data.

16. The printed circuit board assembly line as recited in claim 15 wherein the display is on a handheld device.

17. The printed circuit board assembly line as recited in claim 16 wherein the handheld device includes a barcode scanner.

18. The printed circuit board assembly line as recited in claim 12 further comprising a magazine feeder having a magazine feeder monitor, the processor receiving data from

19. A method for manufacturing a printed circuit board comprising the steps of:

screen printing a printed circuit board with a screen printer;

placing at least one component on the printed circuit board using a placement machine;

monitoring at least one of the screen printer and the placement machine so as to generate data relating to necessary operator tasks; and

displaying the data to the operator.

20. The method as recited in claim 19 further comprising organizing the data as a function of time.

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21. The method as recited in claim 19 wherein more than one placement machine is monitored.

22. The method as recited in claim 19 wherein the data is displayed to a handheld device.

23. The method as recited in claim 19 further comprising sweeping a component tape with a barcode reader.

24. A printed circuit board manufactured according to the method of claim 19.

25. A method for operating an electronics assembly line comprising the steps of:
    monitoring at least two of a screen printer, a first placement machine and a second placement machine so as to generate electronic task data;
    organizing the task data so as to form a list of tasks; and
    displaying the list of tasks.

26. The method as recited in claim 25 further comprising monitoring the assembly line for malfunctions and displaying malfunction data together with the list of tasks.

27. The method as recited in claim 26 wherein the malfunction data includes data indicating at least one of a fiducial misreading, an assembly line conveyor stop, and a failed splice.

28. A handheld device comprising:
    a processor operatively connected to receive data from at least one of a screen printer and a component placement machine; and

a display connected to the processor displaying task data related to the screen printer and the component placement machine.

29. The handheld device as recited in claim 28 further comprising a barcode scanner.

30. A method for scheduling tasks on an assembly line comprising:

receiving input data from at least two of a screen printer, a first component placement machine and a second component placement machine;

determining a first task time as a function of the input data;

determining a second task time as a function of the input data; and

displaying both the first task time and the second task time.

31. Executable process steps operative to control a processor, stored on a processor readable medium, for monitoring an assembly line to schedule maintenance, the steps comprising:

receiving input data from at least two of a screen printer, a first component placement machine and a second component placement machine;

determining a first task time as a function of the input data;

determining a second task time as a function of the input data; and

displaying both the first task time and the second task time.